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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MEINECKE DIAZ, SUSANNA M

ART UNIT

PAPER NUMBER

3694

MAIL DATE

DELIVERY MODE

08/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 09/905,258	Applicant(s) SANKARAN ET AL.	
	Examiner Susanna M. Diaz	Art Unit 3694	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-13,15-25,27-35 and 37-61 is/are pending in the application.
- 4a) Of the above claim(s) 1,3-13,15-24,46,48,50 and 51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25,27-35,37-45,47,49 and 52-61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| <p>1) <input type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br/>Paper No(s)/Mail Date _____</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/>Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6) <input type="checkbox"/> Other: _____</p> |
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### **DETAILED ACTION**

1. This final Office action is responsive to Applicant's amendment filed June 11, 2007.

Claims 25, 35, 45, 47, 49, and 58-61 have been amended.

Non-elected claims 1, 3-13, 15-24, 46, 48, 50, and 51 stand as withdrawn. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claims 25, 27-35, 37-45, 47, 49, and 52-61 are presented for examination.

2. The previously pending rejections under 35 U.S.C. 101 and 112, 2<sup>nd</sup> paragraph are withdrawn in response to Applicant's claim amendments.

### ***Response to Arguments***

3. Applicant's arguments filed June 11, 2007 have been fully considered but they are not persuasive.

Applicant argues that "Sultan does not appear to disclose a method to determine which customers are accessible to which users given a particular product(s) associated with a user. In fact, Sultan does not appear to disclose, in any fashion, how to determine which customers are accessible to which users using Sultan's organizational hierarchy." (Page 16 of Applicant's response) The Examiner submits that the claimed invention does not explicitly control access to particular product(s) associated with a customer. Customers are associated with data, but this does not necessarily mean that

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the users can only access their respectively associated data. As a matter of fact, the user does not even access the customer-related data in many of the claims. Even in claim 60 where a processor is configured to control access to forecast data by identifying a product family..., there is no clear recitation specifying that the user is limited to *only* accessing certain product data. While claim 45 states that customer hierarchy data and product hierarchy data are processed to control access to forecast data, this limitation can be interpreted to read on the concept of filtering data presented to users requesting certain data. Furthermore, Sultan discloses that permission levels for viewing forecast data may be set such that users can only report the data of people who report to them (col. 9, lines 5-30; col. 10, lines 19-59; col. 11, line 9 through col. 12, line 29).

On page 16 of Applicant's response, "Applicant maintains that Sultan does not appear to disclose a method to determine which customers are accessible to which users given a particular product(s) associated with a user...Mere description of multiple types of products does not qualify as a 'product data hierarchy,' as claimed." The claims broadly recite that the product data hierarchy includes a first tier and a second tier, each tier including one or more nodes, wherein a node in the second tier is associated with at least one node in the first tier. The claimed invention does not expressly define the arrangement of the tiers or the nodes (e.g., in terms of database structure and/or effect on how data is accessed). At present, both the tiers and the nodes can merely be various types of data that are all associated with a product of interest.

Applicant argues that Sultan's Widgets1 and Widgets2 are not necessarily indicative of a product family (page 16 of Applicant's response); however, the claimed invention does not define a product family in terms of any limitations affecting the structure or manipulative steps of the invention. As such, any association among various products (e.g., they are both products sold to the same customer) qualifies the products as part of a product family. Sultan discloses multiple products that are sold to the same customer, as discussed in the art rejection below.

Applicant argues the newly added presenting step (on page 17 of Applicant's response). This limitation is addressed in more detail in the revised art rejection below.

Applicant argues that certain features of claims 45, 47, and 60 are not found within the cited references (page 17 of Applicant's response). The Examiner has explained in more detail in the art rejection where such features are found in the cited references, while maintaining the same grounds of rejection. All remaining arguments are addressed in more detail in the art rejection below, which has been expanded upon to explain the existing grounds of rejection in more detail.

In conclusion, Applicant's arguments are not persuasive.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 25, 27-35, 37-45, 47, 49, and 52-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sultan (U.S. Patent 6,804,657) in view of Mentzer et al. (Mentzer et al., Benchmarking Sales Forecasting Management, Business Horizons, May-June 1999, p. 48-56 [GOOGLE]).

As to claims 25, 27-35, and 37-44, Sultan discloses an approach for managing forecast data comprising a method for managing forecast data by identifying, from a plurality of customers, a set of one or more customers associated with a particular user; selecting a set of one or more products from a plurality of products; and presenting the particular user to access forecast data for the set of one or more products for each customer for the set of one or more customers; and by identifying, from a plurality of products, a set of one or more products associated with a particular user; and selecting a set of customers from a plurality of customers. Specifically, Sultan teaches generating a real time global sales forecast for a company that includes the steps of defining a hierarchical structure for a sales force of the company and defining a place within the structure for each member thereof. Original pipeline sales information may then be remotely entered by members of the sales force tagged to the customer, to the relevant product and/or services and to that member of the sales force having entered it. Pipeline sales information is defined as the value of the goods and/or services that the sales person believes he or she will sell to a given customer over a specified period of time. Each member of the sales force is assigned a permission level that determines what information is available to each person within the sales force and in particular, what forecast information is visible, accessible and/or modifiable to and by each person.

The rolled up pipeline and/or forecast information may represent a Regional Manager's rolled up forecast to include all those directly or indirectly reporting to him; or may represent anticipated sales across product lines or for a single product, for any period for which pipeline information exists (Abstract, col. 5, lines 13-31, col. 6, lines 27-48 and col. 11, lines 9-26). Sultan fails to teach presenting the particular user to access forecast data for the set of one or more customers for each product for the set of one or more products. Mentzer et al. teach a functional integration stages where in stage 1, marketing wants yearly products line forecasts and sales wants quarterly forecasts by salesperson territory. To improve, integration requires that common goal setting with regard to forecasting be encouraged across functional areas through communication and company-wide information access. In forecasting approach stage 4, companies fully realize that top-down and bottom-up forecasting approaches are interdependent rather than independent processes. Thus, any changes to one forecast are reconciled with forecasts at the same level from the other approach. To improve the forecasting approach, companies should investigate the possibility of segmenting out key customers and forecasting them separately. Products can also be segmented, with the segments divided according to their demand partners, importance to the company, responsiveness to demand promotions, life cycle stage, shelf life, value, customer service sensitivity, and raw material and production order lead times. To improve forecasting systems, customers should move to a client-server architecture, which abolishes the "islands of analysis" and allows all the functional areas involved in or affected by the forecast to have access and input into the process (para 10, 27, 32, 38).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to include the recommendations of Mentzer et al. with the teachings of Sultan since Sultan teaches generating real time sales forecasts upon demand (col. 2, lines 8-37). Accuracy of sales forecast allows companies to respond quickly to today's ever-changing customer demand. Having up-to-the minute forecasting capabilities, corporations and managers are able to flexibly allocate human and physical resources where they will be most effective and identify and anticipate trends in the marketplace (Sultan: col. 12, lines 24-29). Forecasting performance evaluation is still based on accuracy, but with more recognition that accuracy affects inventory levels, customer service, and marketing and financial plans (Mentzer et al.: Figure 7, Stage 3). Both Sultan and Mentzer et al. teach sales forecasting, therefore there is motivation to combine with a reasonable expectation of success, and the features of the invention are taught by the combination of Sultan and Mentzer et al.

Claims 45, 47, 49, and 52-61 recite limitations already addressed by the rejection of claims 25, 27-35, and 37-44 above; therefore, the same rejection applies. The specific details of the recited data are explained in more detail in the sections addressing the rejections of claims 60 and 61 below.

Additionally, claim 25 recites that "the product data hierarchy includes a first tier and a second tier, wherein the first tier includes one or more nodes and wherein the second tier includes one or more nodes, wherein each node in the second tier is associated with at least one node in the first tier." The fact that the hierarchy has two tiers with at least one node in each tier has no effect on the claimed invention as a

whole. As a matter of fact, the details of the hierarchy are outside the scope of the invention. For example, the identifying and selecting steps are not altered based on the number of tiers or nodes in the hierarchy. Similarly, the last step of "presenting forecast data for the set of one or more customers for each product from the set of one or more products to the particular user" is not affected by the particular arrangement of the hierarchy. For example, the number of tiers or nodes in the hierarchy does not readily change how a user accesses data, at least within the scope of the claim. Consequently, since this limitation does not affect the scope of the claim as a whole, it does not patentably distinguish the claimed invention over the prior art. Nevertheless, the specific details of the recited data are explained in more detail in the sections addressing the rejections of claims 60 and 61 below.

Similar limitations are recited in claim 35; therefore, the same analysis (applied to claim 25) applies. Similar limitations are recited in independent claim 45; however, the tiers are described as "customer" tiers and the nodes have been described as "product" nodes. Nevertheless, the scope of "customer" tiers and "product" nodes is not clearly defined; therefore, "customer" and "product" merely serve as non-functional labels of the tiers and nodes and, consequently, the same analysis (applied to claim 25) applies. Similar limitations are recited in independent claim 49; therefore, the same analysis (applied to claim 25) applies. Additionally, claim 49 recites that "the second plurality of tiers includes a third tier and a fourth tier, wherein the third tier includes one or more nodes and wherein the fourth tier includes one or more nodes, wherein each node in the fourth tier is associated with at least one node in the third tier." This limitation is

analogous to the amendment made respectively to the first and second tiers and nodes; therefore, the same analysis applied to the first and second tiers and nodes are applicable to the third and fourth tiers and nodes.

Claims 58 and 59 recite that "the first tier includes a product family, and wherein the second tier includes a product line, and wherein the product line includes one or more product nodes." Since the product line may comprise only one product node, it is understood that a product line may consist of one product. Sultan discloses that one or multiple products related to a single customer may be subjected to a forecast (col. 9, lines 30-63; col. 10, lines 1-59).

Claim 60 is dependent from claim 45 and recites that "the first customer tier includes a region level, and wherein the second customer tier includes a country level that includes at least one customer node, and wherein the first product tier includes a product family level, and wherein the second product tier includes a line level that includes at least one product node." While the tiers are defined as various levels and nodes, the number of tiers or nodes in the hierarchy does not readily change how a user accesses data, at least within the scope of the claim. Consequently, since this limitation does not affect the scope of the claim as a whole, it does not patentably distinguish the claimed invention over the prior art. Nevertheless, Sultan allows forecasts to be generated in relation to particular customers (col. 9, lines 24-37; col. 10, lines 1-55). The customers are associated with a geographic area (both continent and county) and forecasts may be generated in relation to the selected geographic area (col. 11, lines 26-44; col. 12, lines 16-24). Forecasts may also be based on a specific product type or

multiple products (i.e., a product line or part of a product tier) related to a customer (col. 9, lines 30-63; col. 10, lines 1-59). Permission levels for viewing forecast data may be set such that users can only report the data of people who report to them (col. 9, lines 5-30; col. 10, lines 19-59; col. 11, line 9 through col. 12, line 29). Sultan further states, "Such forecasts may include as little or as much detail as is desired, and may be generated at a high level (across Divisions 1, 2 and 3) or at the lowest level (i.e., down to the pipeline information entered by any of the individual Sales Representatives B1121 et seq.)." (Col. 11, lines 63-67) Claims 1-27 of Sultan define most of the forecast-related filtering factors in terms of a hierarchy. In order to filter data dynamically as specified for customized forecasts, a hierarchical structure (as recited in Sultan's claims) is going to organize the forecast terms in a hierarchical fashion to facilitate sorting of the data. Since Sultan discloses various permutations of the types of forecasts that can be generated, such forecasts are based on the same type of data defined in the claims of the instant application, and this data is stored in a hierarchical fashion, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Sultan to control access to data (i.e., yield customized forecasts) based on any type of combination of the available customer (customer tier, i.e., global or company wide, as seen in col. 12, lines 19-20 or different customers altogether), geographical (e.g., regional or country level), product line level with a product node (e.g., different products associated with one vendor and/or one customer), etc. in order to more conveniently provide various levels of employers, managers, and/or other employees with the most relevant information that is pertinent to

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his/her current forecasting analysis, thereby making Sultan's invention more marketable to a company. ***Similar analysis is applicable to all of claims 25, 27-35, 37-45, 47, 49, and 52-61, especially as it pertains to the step of presenting forecast data for the set of one or more customers for each product from the set of one or more products to the particular user.***

Claim 61 recites the step of "identifying, from a plurality of products, one or more products associated with a particular user, wherein identifying includes selecting one or more product nodes from a plurality of product nodes arranged in a product data hierarchy, wherein the product data hierarchy includes a product family tier and a product line tier, wherein each node in the product line tier is associated with one or more nodes in the product family tier." Again, the details of how the hierarchy is formed do not affect the steps of identifying or presenting and are outside the scope of the invention. The identifying and presenting steps rely on the identification of a product associated with a user and are unaffected by how the product data is arranged in a hierarchy. Consequently, since this limitation does not affect the scope of the claim as a whole, it does not patentably distinguish the claimed invention over the prior art. Please refer to the rejection of claim 60 above as it relates to the limitation "wherein identifying includes selecting one or more product nodes using a product family associated with the user *or* a product line associated with the user, wherein the product family is selected from the product family tier and the product line is selected from the product line tier."

Again, the claimed invention recited throughout claims 25, 27-35, 37-45, 47, 49, and 52-61 repeatedly defines an arrangement of data comprising one or two data hierarchies, each of which comprises a plurality of tiers, each tier comprising one or more nodes. These claims also allow a user to access forecast data associated with a customer and one or more products. Similarly, column 9, line 5 through column 12, line 29 of Sultan disclose that a supervisor or other employee may access a forecast for the sales of a particular product. Various available forecasts may be rolled-up to form an overall forecast. For example, forecasts for products in a family, i.e., a group, of products related to a particular customer (e.g., Widgets1 and Widgets 2 in a widget family) may break forecasts down into each product or may be grouped together to view forecasts related to the product family (col. 9, lines 30-36; col. 10, lines 1-17, 45-49). Also, forecasts may be rolled-up and broken-down based on other factors, such as by account supervisor(s), geographical area(s), or across divisions. Therefore, Sultan's forecasts are generated based on a hierarchy of product data divided into various tiers, levels, and nodes. Sales information may also be accepted and converted into a plurality of currencies (column 2, lines 38-57).

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

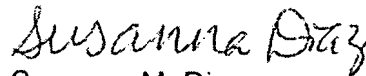
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Susanna M. Diaz  
Primary Examiner  
Art Unit 3694

August 20, 2007